

JPRS-TEP-86-010

28 APRIL 1986

Worldwide Report

EPIDEMIOLOGY

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28 APRIL 1986

WORLDWIDE REPORT EPIDEMIOLOGY

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INTER-AMERICAN AFFAIRS

BRIEFS

AIDS IN CARIBBEAN--The disease AIDS is slowly emerging as a problem in the Caribbean, quite apart from Trinidad and Tobago and Haiti, Prof. Courtney Bartholomew, head of the Department of Medicine at the St. Augustine Campus of the UWI, Trinidad, said on Friday. Although Acquired Immune Deficiency Syndrome (AIDS), has not made a significant impact on the Caribbean, he said, it was possible that the full impact would be felt in the next couple of years, as the AIDS virus had an incubation period of six to eight months. He said, however, that AIDS does not seem to be a big issue for Jamaica as yet because Jamaican victims to date had caught the disease outside of Jamaica. The ratio of carrier of AIDS virus in Trinidad was eight per million, Prof. Bartholomew said and that while it had been estimated that more than 10,000 carriers of the virus were in the United States of America, there might be as many as two million. "The promiscuous male who goes to prostitutes and the promiscuous male who has too many girlfriends is in trouble in Trinidad and Tobago, and although the figure for Trinidad seems low, it is very high for the Caribbean". [Excerpts] [Kinston THE DAILY GLEANER in English 31 Mar 86 p 1]/12828

CSO: 5440/065

BOTSWANA

FIRST TWO AIDS CASES ADMITTED TO HOSPITAL

Johannesburg THE CITIZEN in English 20 Mar 86 p 17

[Text]

GABORONE. — The Ministry of Health disclosed yesterday that the first cases of Acquired Immune Deficiency Syndrome (Aids), have been diagnosed in Botswana.

The Botswana Press Agency (BPA) reports the two patients diagnosed as having Aids about two weeks ago are both citizens of Botswana.

They were admitted to the Princess Marina Hospital in Gaborone and a hospital at the diamond mining town of Orapa, about 500 km from Gaborone.

Confirmation of the cases comes only a few days after the Minister of Health, Mr Lesedi Mothibamele had told a meeting that no cases of Aids had been diagnosed although he could not rule out the possibility of an invasion from neighbouring countries.

According to the principal medical officer in the Ministry of Health, Dr Edward Maganu, there is no known remedy for the cure and the prevention of Aids.

He said that Aids was therefore within the range of terminal diseases. He could not say how Aids could have infiltrated to Botswana which until recently was thought to be safe.

But he suspected that the two victims might have contracted the disease through contact with "latent" patients coming from other countries. He said Aids could be spread through sexual intercourse, faulty blood transfusion and homosexual activities, the agency reports. — Sapa.

/9317
CSO: 5400/101

CANADA

AIDS MEASURES, PROBLEMS, INCIDENCE DISCUSSED

Immigration Policy

Toronto THE TORONTO STAR in English 19 Mar 86 p A3

[Text] MONTREAL (CP) — Canada has decided to accept applications to immigrate from people exposed to the AIDS virus who show no symptoms of the fatal disease, a federal official says.

But Ottawa has no plans to test all would-be immigrants for AIDS antibodies, says Dr. Scott Leslie of the health department.

Leslie, who oversees the department's immigration and quarantine section, said Ottawa has been rejecting all immigration applications from people with acquired immune deficiency syndrome or the less serious AIDS-Related Complex.

He refused to say how many were rejected.

Now, under a guideline that took effect March 1, Ottawa will accept applications from people who register positive on tests for AIDS antibodies tests but who are "totally asymptomatic" of the disease, Leslie said.

A positive result means that a person has been exposed to the virus and could spread the disease.

AIDS is so new that experts are cautious in projecting how many people with the antibodies may fall victim to the disease in 10 or 20 years. Current estimates are 5 to 10 per cent.

The disease often is transmitted

through sexual contact or contaminated blood transfusions.

'Professional acumen'

Ottawa's laboratory centre for disease control said 514 cases of AIDS have been reported in Canada, and 252 of the victims have died.

Leslie said that because Ottawa has ruled out mandatory tests of immigrants for AIDS antibodies, immigration authorities will have to depend on doctors examining potential immigrants to find out whether they have AIDS or the AIDS-Related Complex.

"We'll have to rely on their professional acumen," he said. "It depends on his (the doctor's) line of inquiry."

Ottawa ruled out the tests because of a lack of testing facilities and because it is possible to get false results, Leslie added.

"We are still somewhat in the dark about the true nature of the disease . . . We felt it would be presumptuous to put all our eggs in one basket."

Leslie said he only knows of one country — Saudi Arabia — that requires such tests for all immigrants and long-term visitors.

U.S. officials were also studying whether all applicants for immigration to that country should be tested for AIDS antibodies.

Research in Kenya

Windsor THE WINDSOR STAR in English 24 Mar 86 p B12

- [Text] WINNIPEG (CP) — Important research by University of Manitoba scientists on how heterosexuals spread AIDS among prostitutes in Kenya is threatened by insufficient funds.
- Dr. Neil Simonsen, a university researcher, says information that will be lost if research is stopped will be "virtually irreplaceable." Simonsen says the scientists have applied "all over the place" for \$150,000 to continue.
- "The loss in terms of understanding of the disease and contributions worldwide would be enormous," he says. "It would all have to be started again."

British Columbia Incidence

Ottawa THE CITIZEN in English 27 Mar 86 p A2

- [Text] VICTORIA (CP) — A dozen AIDS victims, declaring they have stopped hiding at home, demonstrated in front of the British Columbia legislature Wednesday to demand a \$500,000 viral testing laboratory.
- "We are tired of being sort of shuffled off to into the dark rooms of hospitals and left to die," said Kevin Brown, spokesman for the victims of acquired immunodeficiency syndrome.
- "We've finally come to the realization that we are no longer ashamed of this illness," he told reporters. "And therefore we are coming out speaking for our rights."
- He said if nothing is done by the time Expo 86 opens in Vancouver May 2, AIDS victims will be very visible at the world's fair.
- There have been 118 AIDS cases in British Columbia to date, and about half of the victims have died, he said. Of the 510 cases reported in Canada, 254 victims have died.

Ottawa Support Group

Ottawa THE CITIZEN in English 10 Mar 86 p C3

[Article by Sherri Barron: "Volunteers to Offer Companionship to Those with AIDS"]

- [Text] A local man dying of AIDS is refused dental treatment. The dentist is afraid to touch him.
- A heterosexual Ottawa man contracts AIDS through a blood transfusion. He tries desperately to hide his illness from the public to spare his family the public shame of a misunderstood disease.
- A lover cares for his partner, who's also dying of AIDS. The lover begins to feel more and more alone with nowhere to turn. Who's there to help him cope?
- These kinds of situations prompted Ottawa's AIDS Committee to establish a services support group for people with AIDS and ARC (AIDS-Related Complex), their families, friends and lovers.
- AIDS, acquired immunodeficiency syndrome, attacks the body's immune system, rendering the victim helpless in fighting off other diseases. People with ARC retain some ability to fight illness and may grapple with disease symptoms for years.
- There is no cure for either illness. AIDS and ARC prey mainly on homosexual and bisexual men, intravenous drug users and hemophiliacs.
- In about two weeks, the committee's first group of trained volunteers will be ready to help these people in any way it can.
- "We're not really there to offer advice, but we can listen and we can offer companionship," says Barry Deeprose, one of the founders of the support group and a Gayline vol-

unteer.

The 13 trained volunteers, now completing the eight-week course, are also willing to do practical favors such as shopping, cleaning and cooking, offering help in obtaining social assistance and other benefits, providing transportation for medical appointments and important errands, making hospital visits and giving care to families and lovers.

The group is open to gays and heterosexuals Deepröse says.

"We're open to anybody who wants help."

The group has also established a referral list of local professionals who feel comfortable working with AIDS patients, such as doctors, dentists, social workers, financial advisers, clergy, lawyers and bereavement counsellors.

The AIDS Committee was formed in August, 1985. It wasn't until Rev. Sally Eaton came along, however, that the support group

got off the ground, Deepröse says.

"We (the committee) had been planning to do something. We were sort of discussing what we should do," says Deepröse. "Sally sort of focused things. She brought not only the initiative but the expertise."

Eaton's work with the terminally ill had given her a special understanding of the knowledge volunteers would need, says Deepröse. She also had years of experience in pastoral care and was involved with the gay community.

"Sally's such a dynamic person, I find, and fair," Deepröse says. "She has a real caring for people and their quality of life."

Anyone who wants help from the support group can leave a message at the Gayline: 238-1717, 7:30 a.m. to 10:30 p.m. Monday to Friday or write to AIDS Help, Box 3043, Stn. D, Ottawa, K1P 6H6.

/12851

CSO: 5420/63

CANADA

ONTARIO GOVERNMENT EXPANDS PARAMEDIC SERVICE

Ottawa THE WEEKEND CITIZEN in English 29 Mar 86 pp A1, A24

[Article by Mark Kennedy]

[Text]

TORONTO — Ottawa-Carleton may get its own paramedic service within a year in a province-wide expansion of the program by the Ontario government.

Health Minister Murray Elston announced Thursday that pilot projects of the life-saving service established two years ago in Hamilton and Toronto will become permanent.

And up to five other Ontario communities will be chosen this year for an expansion of the provincially-funded service in which ambulance attendants are trained in advanced medical techniques.

The program is designed to save lives and reduce injury by cutting the time a victim must wait for some emergency treatments.

To be eligible for paramedic service, Elston said, a community must "have or be moving to adopt" a single emergency telephone number such as 911.

Ottawa-Carleton has already taken a step in that direction, hiring a consultant last year to draw up plans for a 911 system in the region.

But Regional Council, which has been divided on the issue, isn't scheduled to hold a final vote until June.

Health ministry spokesman Doug Enright said the government won't necessarily wait for all applications to be filed before deciding which communities receive the service.

Paramedics, working with hospital-based doctors by two-way radio, are trained to insert breathing tubes, administer intravenous fluids and cer-

tain drugs and provide defibrillation (electric shock to restart the heart).

Ambulance attendants are now restricted in the types of care they can administer. For example, they can't insert intravenous tubes or administer drugs.

The Ottawa-Carleton District Health Council will definitely apply for paramedic service, says Ottawa Ald. Mark Maloney, the region's representative on the council's emergency health services planning committee.

Maloney says he's confident the region will meet the province's requirements.

"There's wide support from the public," he said.

Elston said communities will be asked to show they have a "demonstrated need" for the service and adequate medical and hospital back-up for the training, delivery and maintenance of the paramedic program.

The community will also have to put into place adequate public training programs in cardio-pulmonary resuscitation.

In addition to having a 911 emergency phone line planned or operating, police, fire departments and local hospitals will have to show good co-operation and co-ordination for the 24-hour emergency service.

Maloney said he's confident the 911 system will be approved, and added paramedic service would substantially improve emergency

care in the area.

"It's bringing a part of the hospital out to the scene of the accident."

Elston praised the Toronto and Hamilton pilot projects, which are credited with saving at least 15 lives and treating 4,500 patients since their inception.

About \$1.5 million will be set aside in the next year to be divided among those communities which qualify for the program.

If Ottawa-Carleton is chosen, a base hospital in the area will be designated as the command centre.

Doctors will be sent to Toronto for a training session and will then return to Ottawa to train the paramedics.

/12851

CSO: 5420/64

GHANA

HEALTH MINISTRY TAKES MEASURES TO PROTECT PUBLIC FROM AIDS

AB271829 Accra Domestic Service in English 1800 GMT 26 Mar 86

[Text] The Ministry of Health has instituted measures to protect the Ghanaian public from the disease known as Acquired Immune Deficiency Syndrome, AIDS. This is the result of a report by a West German newspaper that a number of Ghanaians resident in Germany and elsewhere overseas suffer from the disease and are being repatriated home. The measures include a thorough screening of travelers entering Ghana, especially those from countries declared by the World Health Organization as major centers of AIDS infection. Repatriated Ghanaians from such areas are to be screened.

An official statement in Accra today said all immigration authorities at the country's ports and all other points of entry are to ensure a meticulous compilation of the names and particulars of all such persons to facilitate an effective monitoring of their movements. Also blood donated to the Blood Transfusion Bank is to be subject to rigid tests before storage and administration. There should be strict observance of aseptic procedures regarding injection and anything introduced into blood.

The statement further instructs the public to strictly refrain from casual sex with prostitutes and unfamiliar persons.

/9604

CSO: 5400/105

GUYANA

BRIEFS

INCREASE IN MALARIA--The incidence of malaria in the hinterland was twice as high last year as it was in 1984, according to sources close to the Ministry of Health. Steps have been taken to deal with this sharp increase in the incidence of the disease. Recently Dr. Keith Carter was appointed to head the Malaria Eradication Department and Dr. Bakker is now in the Rupununi as Regional Health Officer. With a grant of US\$100,000; from the United Nations Development Programme, spray cans, drugs, vehicles, vehicle parts and out-board engines are being bought and are beginning to arrive in the country. However, better organisation is said to be needed for case detection and treatment. In the gold mining areas the movement in and out of the malaria affected areas makes control of the disease difficult. The Miners' Association is cooperating with the department and efforts are being made to train one member of each mining camp to diagnose and treat malaria. [Text] [Georgetown CATHOLIC STANDARD in English 16 Feb 86 p 2]/12828

IMMUNIZATION PROGRAM--EAST BERBICE--The Ministry of Health Wednesday launched an immunisation exercise in Region Six intended to ensure that more than 350 schoolchildren and members of the public are vaccinated against polio and tetanus. The exercise, the first in a series of campaigns to be carried out in the region, was launched by New Amsterdam Mayor Barbara Pilgrim at the Tutorial Academy High School, New Amsterdam. A six-member health team is engaged in the exercise. Among those present at the launching exercise, were Regional Medical Officer of Health Dr. F. Florendo, Regional Executive Officer Joseph McIntosh and Regional Education Officer Cedile Garrett. [Excerpt][Georgetown GUYANA CHRONICLE in English 28 Feb 86 p 3]/12828

CSO: 5440/068

INDIA

OUTBREAKS OF MENINGITIS CAUSE CONCERN

More Cases in Delhi

New Delhi PATRIOT in English 19 Mar 86 p 5

[Text]

The Government admitted in the Lok Sabha on Tuesday that the number of seizures and deaths caused by meningitis in Delhi had been constantly increasing since December but refused to call it an epidemic.

In the event of an epidemic, cinema houses and schools are closed, Deputy Minister for Health and Family Welfare Krishna Kumar averred while replying to a call-attention motion by Mr V N Patil (Cong) and others on the outbreak of the "epidemic" in the Capital.

His advice to the people was that any suspected case should be immediately rushed to a hospital where alone the disease could be tackled. All public hospitals, he said, had been "energised to deal with the situation and stocked with the requisite".

He refuted a Congress member's charge that drugs to meet the disease were not available in hospitals.

"The Government is fully alive to the situation which is being monitored daily", the Deputy Minister assured the House.

He said during the last three months there had been an increase in the cases of meningitis in Delhi as compared to the immediate preceding months. In

December 1985, there were 222 cases and 33 deaths, January saw 350 cases and 36 deaths. In February there were 453 seizures and 44 deaths and figures for up to 15 March show that the seizures number 236 and 37 deaths.

The Deputy Minister said the disease caused by inflammation of membranes covering the brain and the spinal cord largely affected children and young adults and could cause mortality if not treated promptly.

But the pattern of incidence and mortality as compared to that pertaining during the last year "shows a distinct improvement in the situation and indicates that more and more people are now bringing such cases to the hospitals for management and treatment", the Minister said.

Incidents of meningitis had been reported from Gujarat and Maharashtra this year, he added.

Mr Krishna Kumar said that experiments had not proved that homoeopathic medicine was the best cure for the disease.

The Minister said about two per cent of India's population always carry the bacteria, the most common carrier for the disease, in their throats or upper respiratory track.

The disease, he said, could be checked only by general improvement in environmental conditions, like water, sanitation and avoidance of crowding.

Mr Krishna Kumar said it was not feasible to eradicate meningitis. It has a 10 to 15 years' long-term cycle of occurrence, and also a short-term annual cycle.

Meningitis, he said, was occurring not only in India but throughout the world, including the developed countries. Last year, it erupted in Brazil.

The Minister said the most common medicine available for treatment of the disease was Sulphadiazine and "it is available free in all the hospitals". The medicine, he said, had been sent to Maharashtra, Gujarat, UP, Haryana, Punjab and Rajasthan to check the spread of the disease.

Last month, five high-level meetings were held in the Health Ministry which were also attended by representatives of the World Health Organisation (WHO), Indian Council of Medical Research (ICMR) and the Director General of Health Services (DGHS), he said.

Alert in Bombay

Bombay THE TIMES OF INDIA in English 18 Mar 86 p 3

[Article by Debashish Munshi]

[Text]

BOMBAY, March 17.

A spurt in the incidence of meningococcal meningitis in the city has put municipal medical officers on the alert.

According to civic sources, 42 cases of the infectious disease have been reported from different parts of Bombay since January 1, against 25 cases the whole of last year. At least six patients are reported to have died. Municipal physicians said they knew of only three or four cases of this variety of the disease between 1950 and 1984.

Of the different types of meningitis (inflammation of the covering membrane of the brain and the spinal cord), the meningococcal variety is known to be a virulent and fulminating kind of disease which spreads through the nasal passage.

Caused by the meningococcus bacteria, the disease had been dormant for several years before it surfaced in the city early last year, soon after an epidemic had struck Delhi.

UNDER CONTROL

The fact that the number of cases has nearly doubled in less than three

months this year is a cause for concern, though health officials say that the situation is "under control." The bacteria, they say, dies out with the onset of summer.

The public health department of the Bombay municipal corporation has asked all civic hospitals and dispensaries to keep a special watch for meningococcal meningitis cases and transfer them to the Kasturba hospital for infectious diseases for specialised treatment.

Though mass immunisation is impractical because of the expenses involved, health officials have started preventive measures by administering sulpha drugs to relatives and other contacts of patients. Doctors and other staff working infectious diseases wards of various hospitals have been vaccinated.

Allaying fears of an epidemic, a senior official said the outbreak of the disease was not as severe as in Delhi where meningitis had affected 600 persons and claimed more than 60 lives since January. A distinct feature of the disease in Bombay was its sporadic eruption in different areas, he said.

NO ALARM

The official emphasised that there was no major cause for alarm. However, he advised people to approach the nearest medical centre as soon as they noticed symptoms of fever, headache, drowsiness and rashes on the body.

According to a infectious diseases specialist, the meningococcus bacteria is present in the throats of several people. If a large percentage of the people in a particular area carried the bacteria, meningococcal meningitis could suddenly erupt in one or more of them, he said.

The disease, which was more prevalent in densely-populated areas was curable, he said, but any delay in diagnosis and treatment could lead to permanent brain damage or death.

To effectively combat the dreaded disease, there should be a proper collection of data and a systematic study of the bacteria, the specialist said. Every organism should be isolated, typed and subjected to anti-biotic sensitivity, he added.

According to experts, meningitis is of three types: tubercular, pyogenic (of which meningococcal is a variety) and viral. Meningococcal meningitis can be diagnosed after an examination of the cerebro-spinal fluid.

/9317

CSO: 5450/0124

INDIA

POLIO NOT YET ERADICATED IN MADRAS

Bombay THE TIMES OF INDIA in English 17 Mar 86 p 14

[Text]

MADRAS, March 16 (UNI).

POLIOMYELITIS, which was sought to be eradicated last year under a universal immunisation drive claimed 85 lives in the city last year.

A UNI investigation shows that 1,700 children were admitted in various hospitals in the city last year for treatment of acute poliomyelitis with the institute of child health and hospital under the Madras Medical College admitting over 1,000 patients, as compared to 895 patients admitted in 1984.

At Stanley Medical College hospital in the city 46 cases were admitted last year, the same as 1984, showing no let-up in the incidence.

"The state of the world's children—1986" published by the United Nations' International Children Fund (UNICEF) in its section on India titled "Towards a polio-free Madras" claims that as many as 1,000 children would have been permanently crippled in the next 12 months alone without the 'extraordinary effort'.

ACUTE POLIO ATTACK

While public health authorities do not have estimates of children crippled by the attack in 1985, it is presumed that about 50 per cent of those who survive an acute polio attack might be crippled.

This brings a figure close to the number of crippled said to have been avoided, according to the UNICEF report.

Poliomyelitis is an infectious disease caused by one of the three types of ultra-microscopic viruses transmitted by droplet infection or by oral infection, the latter being the most common form in developing countries.

It has three stages: an initial incubation period, a prodromal (before the onset of symptoms) non-paralytic stage and a definite paralytic illness. Any or all of the limbs and trunk may be affected.

The respiratory or swallowing muscles or both may also be affected in the spinal buffer type which could also be fatal (the other type being spinal polio).

About six to seven per cent of those acutely affected may die, according to doctors.

Veteran paediatricians do not believe that the disease could be eradicated in a year, however wide or intensive the immunisation drive could be.

Dr. R. Santhanakrishnan, director of the Institute of Child Health, said polio could be eradicated by universal immunisation programme in about four years. This view was shared by Dr. N. Sundaravalli, president of the Indian Academy of Paediatricians and Dr. P. Chandra, professor of paediatrics, Stanley Medical College.

One strange phenomenon about the disease is the possibility that doctor could 'provoke' a paralysis in an infected patient in the 'prodromal' phase by injection. Doctors say the patient may or may not be paralysed in the normal course without the injection (given for the treatment of some other suspected illness). This in medical parlance is known as "provoked" paralysis.

Paradoxically, the chances of infection increase as hygienic living conditions improve since an unhygienic environment produces sub-clinical infection and immunity together with maternal anti-bodies passed through breast milk and the placenta.

/9317

CSO: 5450/0126

INDIA

BRIEFS

CHILDREN'S DISEASES REAPPEAR--Howrah, March 17--The number of children who died of measles and chicken pox in north Howrah over the past fortnight has risen to nine. All the children were below the age of seven. Two of them died of chicken pox and seven of measles. The most affected areas are Bibir Bagan, Mirpara Lane, Jaliapara, Nandi Bagan and parts of Benares Road. Mr Tusar Sen, councillor, Howrah Municipal Corporation, said the areas had been almost free of the diseases for the past 10 years. [Text] [Calcutta THE STATESMAN in English 18 Mar 86 p 1] /9317

CSO: 5450/0127

ISRAEL

BLOOD DONATIONS SCREENED FOR AIDS ANTIBODIES

Jerusalem THE JERUSALEM POST in English 19 Mar 86 p 2

[Article by Joanna Yehiel]

[Text]

TEL AVIV. - Blood donated to the country's blood banks will be screened for antibodies to the Acquired Immune Deficiency Syndrome, or Aids, virus, the Health Ministry said yesterday. In addition, seven centres throughout the country will test people directly for the Aids antibodies free of charge, and, if necessary, without a doctor's referral.

The plans were revealed by the ministry at a day-long study session for the press on Aids, at which a comprehensive programme to deal with the disease was detailed.

Although there was no need for panic, Health Ministry Director-General Dan Michaeli told the press, his ministry was taking Aids seriously. Some \$90,000 is being set aside to pay for the plan in the current budget, and another \$1 million will be set aside every year. The programme was recommended by two committees of experts formed by the ministry.

Twenty-three cases of Aids have been diagnosed in Israel since the

disease was discovered here in 1982. Five of these Aids sufferers were tourists and two were Israelis living overseas who have returned to their homes abroad. Of the remaining 16, eight were homosexuals, two were infected through blood donations, and five were hemophiliacs, infected by contaminated Factor 8 blood from the U.S. None of those diagnosed were solely drug users - the other high risk group - although two of the homosexuals were also drug users. In one case the cause of the infection was unclear. Two of these 16 cases were diagnosed in 1982, four each in 1983 and 1984, and five last year. Only five of the 16 are still alive.

Although the blood banks will screen all blood from April 15, it will be some three months before all the stored blood and blood-product supplies are tested. Only after July 15 will health authorities be completely sure that Israel's blood banks are free of contaminating antibodies.

Patients who may need transfu-

sions and who are worried about Aids cannot insist that the blood used for them comes from friends or family, but they can donate their own blood a few weeks in advance of their hospitalization said Dr. Shulamit Bar-Shany, head of Magen David Adom's central blood bank. She stressed that the blood bank would not be used as a diagnostic centre. Although tests will be done, they will be conducted only to ensure that the country's blood supply is Aids-free.

Bar-Shany reported that 5,000 donated blood specimens tested recently had shown no signs of Aids antibodies. But she had found 50 "positives" among a further 1,000 specimens sent for testing by doctors suspicious of possible Aids connections.

The seven Aids clinics are already functioning, albeit on minimum budgets, at Hadassah Ein Kerem, in Jerusalem; Ichilov and Tel Hashomer in Tel Aviv; Kaplan in Rehovot; Beilinson in Petah Tikva; Rambam in Haifa; and Soroka in Beer Sheva.

/9317

CSO: 5400/4510

ISRAEL

BRIEFS

AIDS RESEARCH--WHO invited Israel to help conduct research into AIDS [Acquired Immune Deficiency Syndrome]. Yo Eirik Asvaal, director of the European division of WHO, met with Peres, Shamir, and Health Minister Gur on 10 February, and Israel agreed to participate in the research which will be carried out both here and in Europe. In addition, Israel will occasionally offer advice to the organization on other health subjects. [Summary] [Jerusalem THE JERUSLAN POST in English 13 Feb 86 p 3 TA] /6662

AIDS STATISTICS--The AIDS disease has so far affected 24 Israelis, some of whom have died. This was announced by Haifa Rambam Hospital virologist Dr Tzvi Ben-Yishay. The decisive majority of AIDS patients in Israel are homosexuals who came in contact with U.S. homosexuals. The others contracted the disease after receiving blood transfusions. [Summary] [Tel Aviv HA'ARETZ in Hebrew 13 Feb 86 p 2 TA] /6662

CSO: 5400/4508

JPRS-TEP-86-010
28 April 1986

MINISTER OF HEALTH OUTLINES FUTURE SPENDING PRIORITIES

Kingston THE DAILY GLEANER in English 24 Mar 86 p 3

[Text]

ST. ANN'S BAY, St. Ann, March 23

Hospitals across the island will receive greater support from Government in the next financial year.

This was stated by Minister of Health, Hon. Dr. Kenneth Baugh while delivering the main address at the official opening of a new operating theatre at the St. Ann's Bay Hospital on Friday, March 21.

The new operating theatre which has been named the H.S. Hoskins Memorial Operating Theatre in honour of the donor of the lands on which the St. Ann's Bay Hospital has been constructed, was built at a cost of just over \$1 million and furnished mostly from contributions received from both local and overseas sources.

In making the announcement, Dr. Baugh said "in the future we anticipate a better inflow of capital. Although we have very severe restriction on our current budget, there seems to be some light ahead in the tunnel as far as capital budget is concerned.

"In the next financial year we can look forward to a greater support for hospitals. A modification of our US-AID project will provide about \$10 million to support hospitals that have been changed by the rationalisation programme, such as the Alexandria Hospital in St. Ann.

"Hospitals such as the St. Ann's Bay Hospital will also come in for some support to make sure it can accommodate the increased load and the increased burden that have been thrown out onto members of staff at this institution."

Dr. Baugh also added that the Government's policy would continue to regionalise hospital care and that through a new project that is now being developed with the Inter-American Development Bank, certain hospitals such as the St. Ann's Bay Hospital and May Pen Hospital will be developed into Regional Institutions.

Noting that based on the volume of service that the St. Ann's Bay Hospital has undertaken over the years, in addition to its enormous catchment area; its location in one of the island's tourism centres and also based on the fact that it is situated in a rapidly developing community, Dr. Baugh said that it was imperative that recognition be given to the need for the expansion of services at this institution.

The Minister of Health said the crisis in the health service was too big for either the private sector or the public sector alone to solve. He said that both sectors needed to be united in one effort and that the people of the country need to be more creative and innovative and find some other ways to solve this problem.

People must pay for the services received he said and added that it was necessary to recognize that insurance companies will have to assist in financing the Health Service.

Dr. Baugh said that as a means of achieving additional financial support for hospitals, the Ministry is encouraging the development and renovation of private wards at the various hospitals.

It was also anticipated that in the near future, there would be the decentralization of hospital services to give greater autonomy to Hospital Boards, region by region; thus strengthening the power of the Boards so that they could run hospitals better.

Dr. Baugh paid tribute on behalf of the Government to the contribution received from nurses and other medical personnel over the years and also for the contributions received from both local and overseas groups and individuals.

In a special reference to those in St. Ann, he mentioned the Senior Medical Officer, Dr. Warren Wilson, Dr. George Evans of Chicago, Kaiser Bauxite Company, the hotels and other business ventures.

/12828

CSO: 5440/066

NIGERIA

OUTBREAKS OF MENINGITIS, MEASLES REPORTED IN KADUNA

Kaduna NEW NIGERIAN in English 5 Mar 86 pp 1, 6

[Article by Abdullahi Yelwa]

[Text]

THE outbreak of the killer disease Cerebro-Spinal Meningitis (CSM) has been reported in seven local government areas of Kaduna State.

General Manager of the Kaduna State Health Management Board, Dr. Y.D. Armiya'u told the *New Nigerian* that the areas affected were Mani, Ikara, Katsina, Dutsin-Ma, Daura, Funtua and Malumfashi.

Dr. Armiya'u said the government had released 150,000 Naira for the purchase of drugs.

In Katsina Local Government Area, more than 300 cases of the disease had been reported. Three victims have died so far.

A report from the zonal office of the state Health Management Board in Katsina said the house of the Emir of Katsina in Sabon Gida has been converted into a quarantine for the victims of the disease.

According to the report, all vehicles belonging to the local government had been mobilised while nurses and doctors in the area had been summoned to deal with the contingency.

In Batsari, medical officials confirmed that 6-10 cases of meningitis had been treated daily since mid 1985.

Similar reports from Mani Local Government indicated that there were sporadic outbreaks of the disease in five villages and a request had since been made by the health officials in the local government area for CSM vaccine.

In Dutsin-Ma Local Government, Karofi, Safana, Yan Tumaki and some villages in Musawa are reported to have

cases of the disease. Isolation camps had since been set up in these areas and victims are said to be responding to treatment.

In Ikara Local Government, one person is so far confirmed dead in Makafi as a result of the disease.

Similar outbreaks have been reported in Funtua, Daura and Malumfashi local government areas of the state. Similar medical actions are said to have been taken and patients are said to be responding to treatment.

Dr. Armiya'u urged everyone who noticed the symptoms of the disease to immediately contact the hospital.

The basic symptoms of the disease, Dr. Armiya'u said, were fever, headache, vomiting and neck rigidity.

He also warned that people should avoid sleeping in congested areas and to keep their environment clean.

The Kaduna State Government, Dr. Armiya'u said, had already purchased enough drugs for immunization against meningitis, imploring that people should turn out en masse for immunization to avoid contracting the disease.

Also, reports reaching the state Ministry of Health confirmed that the outbreak of measles, another deadly disease, has been claiming lives in Saminaka Local Government area since mid 1985.

The death toll of the disease in Saminaka stands as follows: Kurmin Dodo, 49 people were reported dead out of 107 cases; Domawa, 18 were reported dead out of 64 cases; Garun Kurama, 15 were reported dead out of 48 cases; Kaibi, 15 were reported dead out of 40 cases.

NIGERIA

90 HOSPITALIZED FOR MENINGITIS IN KANO

Kaduna NEW NIGERIAN in English 6 Mar 86 pp 1, 3

[Article by Sani Karuna]

[Text]

NINETY persons have been admitted in hospital in Kano suffering from the deadly Cerebro-Spinal Meningitis (CSM), Secretary of the Health Services Management Board, Alhaji Danjuma Adamu, has said.

Meningitis is a disease which afflicts the spinal cord and usually occurs during the hot season.

He told the *New Nigerian* in Kano that they were admitted at the Infectious Disease Hospital (IDH) Kano.

He said no one lost his life and there were no other outbreaks in other parts of the state.

Alhaji Danjuma advised the

public to avoid overcrowding in their bed rooms and also to avoid staying in a place with inadequate ventilation. He said such places are the most likely areas for catching the disease.

He also advised people in Kano to sleep in open places or make sure that there was enough ventilation in their bedrooms.

He said the Ministry of Health had mounted a serious immunisation campaign against the disease and expressed the hope that the situation could be controlled with the full co-operation of the public.

He appealed to the people to report any suspected cases of the disease immediately.

/12851

CSO: 5400/108

PORTUGAL

BRIEFS

LISBON AIDS STRAIN DISCOVERED—During a symposium that took place in Lisbon last week, Luc Montagnier, the French scientist who was the first to identify the AIDS virus (LAV-HTLV 3), disclosed that a second strain of AIDS has been discovered. The new virus, called LAV II, was identified in the Paris Pasteur Institute; however, it was isolated in serum that had been sent from Lisbon, having been obtained from patients receiving treatment in the infectious-contagious diseases ward of the Egas Moniz Hospital. These patients, who came from Guinea-Bissau, evidenced the same symptoms as AIDS; however, their clinical characteristics were different, leading physicians to hypothesize on the existence of a different virus. In spite of the limited incidence of the LAV II virus, its identification will contribute to a more precise localization of the disease's origin and will introduce new data in the research of an AIDS vaccine. [Excerpt] [Lisbon EXPRESSO in Portuguese 28 Mar 86 p 1] /9738

CSO: 5400/2537

SOUTH AFRICA

EXPERTS IDENTIFY NEW AIDS VARIANT

Johannesburg THE STAR in English 29 Mar 86 p 4

[Text]

Local AIDS experts have identified a new variant of the deadly disease, believed to be the first of its type seen in South Africa.

Writing in the latest edition of the SA Medical Journal, Dr Frank Spröcklen and Professor Walter Becker, head of Stellenbosch University/Tygerberg Hospital's department of medical virology, say a case of what they call the Vinna (the Icelandic word for wasting) Variant of AIDS had been seen in Cape Town last year.

They describe the case of a 33-year-old man admitted to a city hospital in October last year.

They said his death illustrated "that the AIDS virus can kill within 11 weeks by causing severe wasting without significant and persistent opportunistic infection, malignancy or profound diarrhoea".

Similar cases were reported from Uganda late last year and were described then as "Slim

Disease" because patients with this version of acquired immune deficiency syndrome simply waste away, becoming extremely emaciated before death.

The two doctors, both local representatives on the national AIDS Advisory Group, say that doctors should be warned of this unusual manifestation of AIDS, in which the patient does not necessarily have the extremely depressed immune system which is the norm for AIDS sufferers.

Pointing out that AIDS had been shown to manifest itself in at least three different ways, they say the disease "is now the great mimicker of the 80s, just as syphilis was earlier in the century".

Meanwhile the number of AIDS cases in the country, including two highly probable cases under investigation in Cape Town, has risen to at least 29, with 19 deaths.

/9317
CSO: 5400/103

TANZANIA

CHILDREN'S IMMUNIZATION CAMPAIGN BEGINS

Dar es Salaam DAILY NEWS in English 2 Apr 86 p 3

[Article by Halima Shariff]

[Text] A total of 265,878 children, aged between one day and five years, are expected to be vaccinated against TB, measles, polio and diphtheria. The exercise begins today.

An implementation programme issued by the City Council and the Party in Dar es Salaam yesterday says the Minister of Health, Dr Aaron Chidu, is expected to launch the immunisation campaign at the Antulabhai clinic at Mnazi Mmoja.

The programme says that some 58,418 children under the age of one will be vaccinated during the campaign to be repeated on May 6 and June 3 this year.

While 207,640 children between one and five years are to be immunized, the campaign will also include expectant mothers. Some of the 292,288 women, between 15 and 44 years of age will be immunised.

The programme shows 104 vaccination centres which include all dispensaries in rural and urban Dar es Salaam region will carry out the campaign. Each centre will have at least four health workers.

It was not known yesterday which vaccine will be the first to be administered on the children. However, it is understood that they will receive one vaccine once every month for three months.

The Party has appealed to leaders to make sure all eligible children are immunised. The Party has asked the leaders to visit the centres to monitor the progress of the campaign.

The Immunization campaign, to be carried out by every region in the country, is in response to a directive by the Party National Executive Committee (NEC) to protect children from killer diseases, to reduce child diseases and deaths.

Signing in January this year a declaration to join the universal child immunisation programme which was launched by the United Nations last October, President Mwinyi called for a vigorous implementation of the programme to protect children from preventable diseases by 1988.

TANZANIA

BRIEFS

BUTIAMA GETS CHOLERA DRUGS—Adequate drugs have been sent to Butiama Village to contain the spread of cholera which broke out at the village a week ago killing 11 people, Shihata reported. The doctor in charge of Butiama health centre, Dr Gideon Nazara, could not however, say the amount of drugs sent to the village but confirmed yesterday that the drugs were adequate to contain the spread of the disease at the village. He said the drugs were from Dar es Salaam, the Shirati Mission Hospital and the Zonal Medical Store in Mwanza. Dr Mazara said two doctors from the Muhimoni Medical Centre were at the village investigating the origin of the disease. He said the village health centre treated 27 patients for the disease. The disease broke out at the village on March 18. Some 35 people were initially attacked, 24 of whom were admitted immediately. [Text] [Dar es Salaam DAILY NEWS in English 31 Mar 86 p 3] /9317

CHOLERA KILLS TWO IN BUNDA—Nyatwari Village in Bunda District Mara Region has been placed under quarantine following the death of two people from cholera, Shihata reported. The District Commissioner Ndugu Marry Chipps said yesterday that the disease broke out at the village last week and that initially ten people were infected with the disease. She said that five people were being treated for the disease at the village. Doctors and nurses from the district hospital at Bunda have moved to the village to treat patients, she added. Ndugu Chipps said Party and Government leaders were at the village to mobilise the people build toilets. [Text] [Dar es Salaam DAILY NEWS in English 2 Apr 86 p 3] /9317

CSO: 5400/106

UNITED KINGDOM

GOVERNMENT LAUNCHES 'MAJOR CAMPAIGN' TO FIGHT AIDS

London DAILY TELEGRAPH in English 14 Mar 86 p 17

[Article by David Fletcher]

[Text] A CAMPAIGN to combat the killer disease Aids was announced by the Health department yesterday. It is one of the biggest public health drives ever organised by the Government.

The £2,500,000 campaign will give information on how Aids can be transmitted and what can be done to control its spread.

A leaflet has been drawn up by the DHSS listing in explicit terms which sexual practices are safe and which are risky.

A major series of advertisements will launch the campaign on Sunday, together with a telephone information service, operated by the College of Health, to provide further details.

Nearly 20,000 people in Britain are estimated to have been in contact with the Aids virus. There have been 305 confirmed cases, of which 157 have died.

Dispel myths

Mr Hayhoe, Health Minister, said: "The chances of survival of those who contract the disease are slim. There is no cure."

"The Government felt it right to try and limit the spread of this very dangerous infection by an information campaign which will dispel the myths about Aids among some people who may have picked up half the story."

The DHSS leaflet says that Aids does not only affect homo-

sexuals. It can be spread by having sexual intercourse with an infected person or by an injection of contaminated blood.

"No one has ever become infected from toilet seats, door knobs, clothes, towels, swimming pools, food, cups, cutlery or glasses," it says.

Highest risk

But it warns that intimate kissing with an infected person may be risky. Rectal sex involves the highest risk and should be avoided.

"Any act that damages the penis, vagina, anus or mouth is dangerous, particularly if it causes bleeding."

Dr Donald Archeson, the Government's Chief Medical Officer, said that Aids was spreading outside the major risk groups of homosexuals and drug injectors, but there was some evidence from America that it was spread through prostitutes to heterosexuals.

He said it would be foolish and wrong not to run an information campaign about Aids because the disease might spread to the community at large unless those most at risk modified their behaviour.

The British Medical Association welcomed the campaign as "an important contribution to public health."

/12828
CSO: 5440/067

VIETNAM

BRIEFS

VENEREAL DISEASE TREATMENT STRATEGY--The venereal disease prevention sector of Vietnam has designed a completely new approach to the prevention and treatment of venereal disease by applying modern science to the actual situation in Vietnam. The new method consists of compartmentalizing the region affected into small areas and in completely eradicating the diseases in each one. This technique has been accepted as a correct approach by the World Health Organization. Due to an intensification of health education among the people concerning the non-incurable nature of venereal disease, in the past 10 years the proportion of people affected by these diseases has decreased from 2.1 percent to 1.5 percent. The majority of patients have been treated at home under a uniform therapeutical method which was closely monitored. As of the end of 1985, inpatients equaled only one-sixth of outpatients, and almost all inpatients had contracted the diseases several years earlier. At present, the venereal disease prevention sector is actively applying modern treatment techniques such as simultaneous application of different treatment methods, alternate physical therapy, rehabilitative surgery, and so on, to support outpatient treatment. With these methods, it is certain that by the end of the 1986-1990 plan, venereal disease in Vietnam will be checked. [Text] [Saigon SAIGON GIAI PHONG in Vietnamese 11 Jan 86 pp 1, 4] 9458

CSO: 5400/4357

GERMAN DEMOCRATIC REPUBLIC

POTENTIAL THREAT FROM NON-LOCAL EPIDEMIC VETERINARY DISEASES

Jena MONATSHEFTE FUER VETERINAERMEDIZIN in German Vol 41 No 3, 1986 pp 73-75

[Article by K. Vogel: "Non-local Veterinary Epidemics, Potential Threat, Bluetongue"]

[Text] During the last 10 to 20 years a series of new veterinary epidemics have appeared in the GDR, such as bee varroatoses, canine parvoviruses, and the paramyxovirus infection of pigeons. This development has resulted in an inquiry of the potential danger of non-local veterinary epidemics to the GDR and of their research utilizing objective criteria.

Non-local animal epidemics are understood to be those whose pathogens are not native. Exceptions include the production of immunopreparations and diagnostic preparations for the organisms transmitting these veterinary epidemics. For practical purposes, veterinary epidemics are also considered "non-local" when they have been exterminated subsequent to recent introduction. However, they may not form any enzootic populations within this country, and their pathogens may neither occur in native populations nor may any inanimate pathogen reservoirs exist locally.

The concept of "non-local" also entails distinctions arising out of historic and geographic considerations. The following subdivision of non-local veterinary epidemics is proposed:

Veterinary epidemics that have never occurred in the GDR:

- Veterinary epidemics whose disease or pathogenic territories exist exclusively outside of Europe (e.g., coast fever)
- Veterinary epidemics occurring on GDR territory
- Veterinary epidemics temporarily exterminated subsequent to GDR introduction
- Veterinary epidemics eradicated due to a long term curative program (e.g., bovine brucellosis, 1981)
- Veterinary epidemics extirpated at some historical time in the past (e.g., bovine lung epidemic, 1927)

Following expert inquiry, a list of non-local veterinary epidemics was constructed on the basis of the priority principle. Authorities questioned were asked to cite the non-local animal epidemics representing the greatest threat to GDR animal populations:

1. Foot and mouth disease O, A, C
2. Foot and mouth disease SAT, Asia
3. African hog cholera
4. Hog cholera
5. Bluetongue
6. Rift Valley fever
7. Vesicular swine disease
8. Cattle plague
9. Contagious equine metritis
10. African equine plague

The potential threat of a non-local veterinary epidemic results from the combined assessment of its threat of introduction, propagation subsequent to successful introduction, and the expected effects of the introduction and propagation.

A method developed for assessing potential danger permits the use of such available objective criteria as:

- specific pathogenic characteristics
- individual details on the existing disease and pathogen territories of the veterinary epidemic
- the transmission process
- specific influencing factors on the epizootiology of the animal epidemic following successful introduction
- expected economic consequences

and assessment of the danger of introduction, propagation threat, and the critical expected effects subsequent to successful introduction and propagation of the veterinary epidemic.

The use of this method to evaluate the potential danger of bluetongue, a veterinary epidemic belonging to List A of the International Veterinary Epidemic Office gave the following selected results for the GDR:

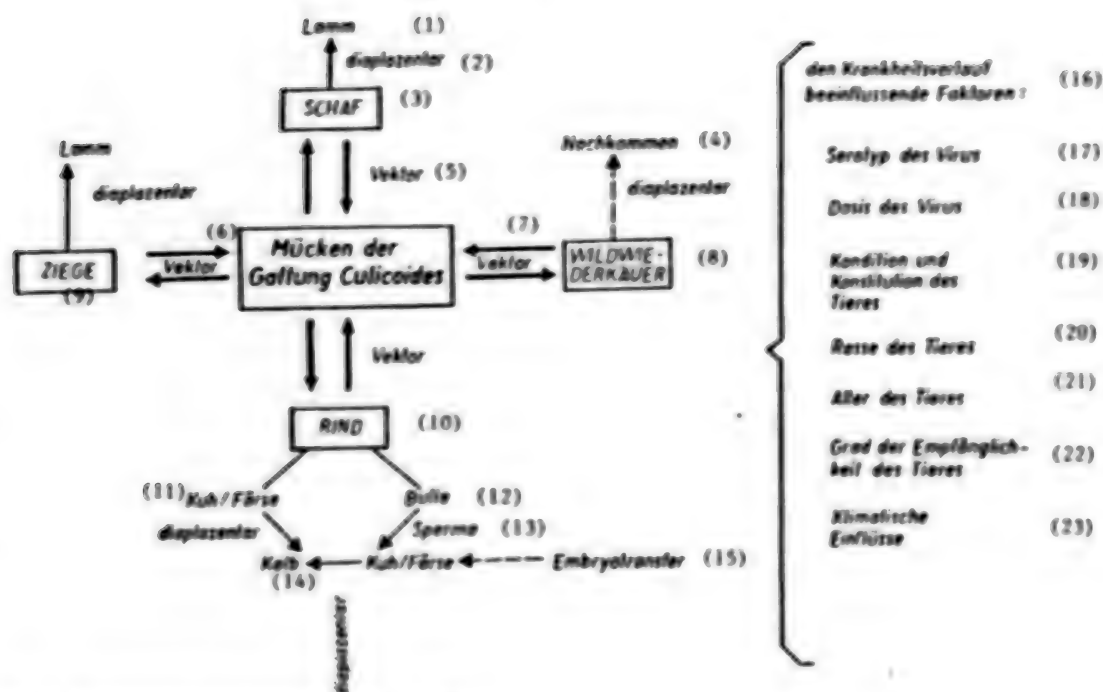
Danger of Introduction

Bluetongue has been spreading steadily in the last decades. Until 1940 (excepting Cyprus), it was confined to the African continent, but in 1948 bluetongue reached North America and quickly spread to southeastern and southwestern Asia in the '50's and '60's. Recent investigations confirmed serological diagnosis and virus isolation in Australia, Central and South America. European contacts include a damaging epizootology on the Iberian Peninsula (Manso-Ribeiro et al. 1957; Lopez and Botija 1958) as well as outbreaks on a Greek island (Vassalos 1980) and in western Turkey (Yonguc et al. 1982).

Another study of concern was presented at an international symposium in 1984, and it has since been verified: a deer from an Austrian game breeder tested positively for bluetongue during the course of export proceedings (Taylor, personal communication 1985).

Based on the understanding of the epizootiology of the disease (Figure 1 portrays the principal propagation pathways of bluetongue), we must conclude that the introduction of this veterinary epidemic can result in infection of every living ruminant in an invaded region. Thus epizootiology indicates the crucial significance of cattle in the epidemic. Bluetongue is not clinically apparent in 95 percent of all cattle (Bowne 1973; Barber et al. 1980); viremia duration can extend to 300 days (Luedke and Walton 1980). If calves are infected diaplacentally during early gestation, they will be viremic at birth and can remain latently infected to some extent for up to one year (Luedke et al. 1977a, b). Similar conditions exist in individual species of wild ruminants, and this would reinforce the importance of the possible role of zoo animal importing (Stott et al. 1982). The virus is shedded by bulls in the sperm (Luedke et al. 1975; Bowen et al. 1983). Females are infected via copulation or insemination, and they can bear calves infected with bluetongue virus (BTV; Luedke and Walton 1980; Bowen and Howard 1984). Maintenance in liquid nitrogen for months does not reduce the infectiousness of the virus in sperm (Bowen and Howard 1984).

(See Figure 1 on following page)



Key: Figure 1

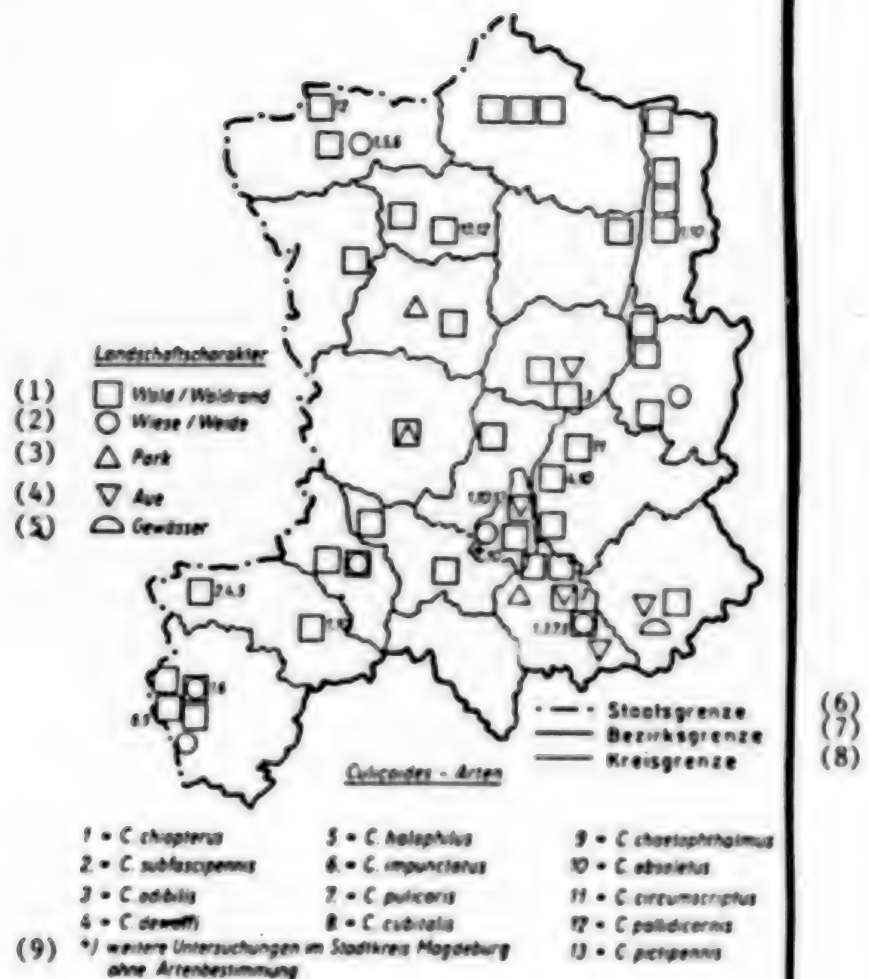
- | | | | |
|-----|---------------------------|-----|--|
| 1. | Lamb | 15. | Embryo transfer |
| 2. | Diaplacentally | 16. | Factors determining disease course |
| 3. | Sheep | 17. | Viral serotype |
| 4. | Descendants | 18. | Viral dosage |
| 5. | Vector | 19. | Condition and constitution of animal |
| 6. | Gnats of genus Culicoides | 20. | Breed of animal |
| 7. | Vector | 21. | Age of animal |
| 8. | Wild ruminants | 22. | Degree of sensitivity of animal |
| 9. | Goat | 23. | Climatic factors |
| 10. | Cattle | 24. | Principal bluetongue transmission pathways |
| 11. | Cow/Heifer | | |
| 12. | Bull | | |
| 13. | Sperm | | |
| 14. | Calf | | |

Propagation Danger Subsequent to Successful Introduction

There are at least 22 serotypes with highly variable pathogenicity and virulence (Gibbs 1983). Thus there is not only the possibility of devastating epizootiologies with high morbidity and mortality, but also an unseen propagation with later sporadic manifestation in individual herds. There exists hardly, if any, cross immunity between the individual serotypes (Jeggo et al. 1983).

Blue tongue is an arbovirus infection. The transmitting gnats of genus *Culicoides* (Diptera, Ceratopogonidae) are in worldwide distribution. Results of a single study on this genus in the GDR near Magdeburg are shown in Figure 2. Only a few species are capable of transmitting bluetongue. But it is noteworthy that in the GDR there is a species, *Culicoides obsoletus*, in which BTV was isolated on Cyprus (Mellor and Pitzolis 1979). There are numerous accessible GDR biotopes, since culicoid larvae are semiaquatic and are capable of adapting to diverse biotopes (Havelka 1976). Whether the central European populations of this species are receptive to BTV is another subject of further research, as are studies on the gnats' biology necessary for defining a vector status. Wintering by BTV in the GDR climatic conditions is possible not only in cattle but perhaps in native wild ruminants as well.

(See Figure 2 on following page)



(10) Abb. 2 Vorkommen der Gattung *Culicoides* (Diptera: Ceratopogonidae) im Bezirk Magdeburg in den Jahren 1968 bis 1970 und 1972 (nach Schuster 1984)

Key: Figure 2

1. Forest/Forest edge
2. Meadow/Pastureland
3. Park
4. Alluvial forest
5. Water
6. National border
7. District border
8. Rural district border
9. +) further investigations in the Magdeburg district without being species specific
10. Figure 2. Prevalence of the genus *Culicoides* (Diptera: Ceratopogonidae) in the Magdeburg district from 1968 to 1970 and 1972 (after Schuster 1984)

Expected Effects of Introduction and Propagation

The course of the disease is influenced by various factors (Figure 1), suggesting a certain variability in conceivable economic costs. A fully receptive sheep population could suffer morbidity rates up to 100 percent, and lethality of 75 percent has been observed (Lopez and Botija 1958; Metcalf and Luedke 1980).

Conclusions

The following suggestions are proposed as necessary to consider in developing effective prophylaxis of bluetongue invasion and to minimize the effects of a successful introduction:

- Creation of diagnostic procedures for bluetongue.
- Increased interdisciplinary research on the disease vectors, particularly regarding entomologic research into the vector potential of native culicoid fauna.
- Increasing understanding of non-native veterinary epidemics in the basic and supplemental curriculae of veterinarian students.

BIBLIOGRAPHY

1. Barber, T.L., Osburn, B.I., Stott, J.L., "What's new in bluetongue research," Calif. Vet. 34, 28, 1980.
2. Bowen, R.A., Howard, T.H., Entwistle, K.W., Pickett, B.W. "Seminal shedding of bluetongue virus in experimental infected mature bulls," Amer. J. Vet. Res. 44, 2268, 1983.
3. Bowen, R.A., Howard, T.H., "Transmission of bluetongue virus by intrauterine inoculations or insemination of virus-containing bovine semen," Amer. J. Vet. Res. 45, 1386, 1984.
4. Bowne, J.G., "Is bluetongue an important disease in cattle?" J. Amer. Vet. Med. Ass. 163, 911, 1973.
5. Gibbs, E.P.J., "Bluetongue--an analysis of current problems, with particular reference to importation of ruminants to the United States," J. Amer. Vet. Med. Ass. 182, 1190, 1983.
6. Havelka, P., "Ceratopogoniden-Emergenz am Breitenbach und am Rohrwiesenbach (1971-1972)," Arch. Hydrobiol., Suppl. 50, 54, 1976.
7. Jeggo, M.H., Grum, I.D., Taylor, W.P., "Clinical and serological response of sheep to serial challenge with different bluetongue virus types," Res. Vet. Sci. 34, 205, 1983.

8. Lopez, C.A., Botija, S.C., "L'épizootie de fièvre catarrhale ovine en Espagne (Blue Tongue)," Bull. Off. int. Epiz. 50, 65, 1958.
9. Luedke, A.J., Walton, T.E., Jones, R.H., "Detection of bluetongue virus in bovine semen," Proceed. World Vet. Congr. 20, 2039, 1975.
10. Luedke, A.J., Jochim, M.M., Jones, R.H., "Bluetongue in cattle: effects of *Culicoides variipennis*-transmitted bluetongue virus on pregnant heifers and their calves," Amer. J. Vet. Res. 38, 1687, 1977a.
11. Luedke, A.J., Jochim, M.M., Jones, R.H., "Bluetongue in cattle: effects of vector-transmitted bluetongue virus on calves previously infected in utero," Amer. J. Vet. Res. 38, 1697, 1977b.
12. Luedke, A.J., Walton, T.E., "Effect of natural breeding of heifers to a bluetongue virus carrier bull," Proceed. XI. Int. Congr. Dis. Cattle, 478, 1980.
13. Manso-Ribeiro, J., Rosa-Azevedo, J.A., Noronha, F.O., Braco-Forte Jr., M.C., Grave-Pereira, C., Vasco-Fernandez, M., "Fièvre catarrhale du mouton (Bluetongue)," Bull. Off. int. Epiz. 48, 350, 1957.
14. Mellor, P., Pitzolis, G., "Some observations on breeding sites and light trap collections of *Culicoides* during an outbreak of bluetongue in Cyprus," Bull. ent. Res. 69, 229, 1979.
15. Metcalf, H.E., Luedke, A.J., "Epizootiology of bluetongue in the United States of America," Bull. Off. int. Epiz. 92, 507, 1980.
16. Scott, J.L., Lauermann, L.H., Luedke, A.J., "Bluetongue virus in pregnant elk and their calves," Amer. J. Vet. Res. 43, 423, 1982.
17. Vassatos, M., "Cas de Fièvre catarrhale du mouton dans L'Île de Lesbos (Grèce)," Bull. Off. int. Epiz. 92, 547, 1980.
18. Yonguc, A.D., Taylor, W.P., Csantos, L., Worrall, E., "Bluetongue in western Turkey," Vet. Rec. 111, 144, 1982.

13225/12858

CSO: 5400/3014

INDIA

BRIEFS

RINDERPEST DEATHS REPORTED--Nearly 450 cows and buffaloes have died in different districts of West Bengal following the outbreak of the rinderpest epidemic since the last week of January according to Dr P.P. Kundo, Director of Veterinary Services in Calcutta, on Thursday. Dr Kundo said that the outbreak had probably been brought under control and there were no reports of fresh attacks since the first week of March, but cattle owners were reluctant to have their cows and buffaloes vaccinated. The Burdwan district has been worst affected since the epidemic broke out. Reports of cows and buffaloes dying reached Calcutta from Asansol, Durgapur and Rangunj in the last week of January. The outbreak spread to Hooghly, Murshidabad, Birbhum, North 24-Parganas, and Calcutta. To date, three buffaloes have died near Jadubabu Market in Calcutta. To contain the spread of the disease more than 200,000 cows were vaccinated last month. Dr Kundo regretted that this disease did not respond to any medicine and the treatment could only be symptomatic. The mortality rate varied between 70 and 90 percent. In the recent outbreaks large numbers of the more expensive mixed bred cows have been victims. [Text] [Calcutta THE STATESMAN in English 15 Mar 86 p 3] /9317

CSO: 5450/0125

BOTSWANA

BROWN LOCUST INVASION UNDER CONTROL

Gaborone DAILY NEWS in English 26 Mar 86 p 1

[Text]

GABORONE: Swarms of the brown locust continue to invade Botswana from South Africa, but efforts to bring the locusts under control are effective.

This was announced in a progress report released by the Ministry of Agriculture.

According to the report, migrating swarms have been reported as far inland as Kang, Duthiwe/Takatokwane, Moshaneng and Ngwaketse South.

The swarms found in the South-West and South-East are far between but tend to be larger and frequency of locust swarm sightings in these areas has decreased, the report says.

Frequency of swarm sightings inland is however, much smaller according to the report.

"Also in the South-West areas, hoppers are now found in many places. These hoppers are the first generation of the initial swarms, the report states.

The report, however states that although egg-laying

continues inland, hoppers are not yet active in this area.

Progress is being made in controlling the locusts, despite small isolated swarm entering the country at many different points and swarm mobility capable of covering long distances fairly rapidly, it says.

According to the report the anti-locust programme is now fully operational with aircraft and ground teams operating from bases in Tsabong and Jwaneng.

In addition, ground spraying teams are located in several regions throughout the outbreak area.

It further stated that ground spraying efforts be increased to control hoppers which are now wide spread in the South-West and are expected to increase further inland.

Remnants of small isolated swarms from the initial invading locusts are also effectively controlled by ground equipment, the report states. **BOPA**

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TANZANIA

BRIEFS

RED LOCUSTS SIGHTED AT NGARA—Some red locusts have been seen around Ngara town in Kagera Region, apparently scattered around one hectare of grasslands, reports reaching Dar es Salaam from Bukoba said on Monday. An official of the Ministry of Agriculture and Livestock Development confirmed in Dar es Salaam yesterday that reports on the locusts were received at the Ministry Headquarters through a police message three days ago. There were no indications whether there had been any destruction to crops or whether the locusts had been sighted elsewhere in the district apart from Ngara town. The Ministry official could not say what steps had been taken, adding that the responsible officials were out of town. [Text] [Dar es Salaam DAILY NEWS in English 26 Mar 86 p 3] /9317

QUELEA BIRDS DESTROY CROPS—Quelea quelea birds have invaded more than 25 villages in Kishapu, Nindo and Ngezi divisions of Shinyanga Rural District, destroying an estimated 1,200 hectares of grain farms. Village leaders in the affected areas fear that the non-arrival of a sprayer plane to kill the birds may leave the population with a food scarcity, Shihata reports. The villagers say they had been told by experts that the right time to bring in the sprayer plane would be when the birds were breeding. However, the villagers say this would mean no harvest for the area, seriously demoralising the peasants. According to village leaders, the birds spend nights in the bushes along Manonga river and invade the millet farms in the mornings. The affected villages include Usule, Mwawazo, Sumbigu, Mang'osha, Iserema, Ng'wanala, Ndala, Bugaya, Mpeja, Ikonokelo, Nunga and Kijongo. The birds were first reported by the Regional Agricultural Office in February when they were said to have destroyed about 500 hectares of the crops. [Text] [Dar es Salaam DAILY NEWS in English 1 Apr 86 p 3] /9317

C50: 5400/106

VIETNAM

METHODS TO PROTECT WINTER-SPRING CROP DISCUSSED

Hanoi NHAN DAN in Vietnamese 4 Mar 86 p 2

[Article by Nguyen Quang Tho, MA, Vegetation Protection Department, Ministry of Agriculture: "Methods To Eliminate Harmful Insects and Diseases and Protect the Winter-Spring Crop"]

[Text] This winter-spring season, protecting the crops is quite different from in previous winter-spring seasons. In the southern provinces, the winter-spring rice is in the tillering, heading and milky stages. Leaf rollers and "phao" insects, with densities of tens of insects per square meter, have infested tens of thousands of hectares, a much larger area than during last year's winter-spring season. Rice gall flies are causing damage in the central coastal provinces, rice blast has begun to spread in a narrow area in the Mekong Delta provinces, and rats are destroying rice in many places. In the northern provinces, the early spring rice is tillering, and the main spring rice is being transplanted. But here, too, the situation regarding harmful insects and diseases is different than in previous fifth-month and spring seasons. Stem borers, which can be found in last year's tenth-month rice stalks and which are about to destroy this year's fifth-month and spring rice crop, are present in much larger numbers. At the end of January, brown planthoppers and rice blast appeared in the Red River Delta. At this time last year, rice blast caused serious damage in various places, but this year outbreaks are not as widespread. There are also differences concerning rice leaf beetles.

Faced with this situation, in order to prevent harmful insects and diseases from seriously damaging this year's winter-spring rice crop at a time when there is not enough insecticide or pumps to satisfy production requirements, insect and disease prevention and control must concentrate on the following main tasks:

First, regarding the winter-spring rice in the southern provinces, efforts must be concentrated first of all on controlling the rice leaf rollers and "phao" insects that are damaging the rice and on protecting the boots in order to keep yields from falling. Eliminating these types of insects is quite easy. All insecticides (phosphate and organic fertilizers, carabamat, organic chlorine, plant matter) are effective provided that the proper amounts are

applied at the right time. If insecticides and pumps are not available, nets can be used to catch the butterflies and greatly reduce the number of insects.

Rice blast damages the heads and ears and causes stunting. Thus, if this disease appears or seed has been affected, kivazin or hinosan must be sprayed in order to stamp out the pockets of disease. Also, spraying must be done when the rice begins to head and after the rice has headed so that this parasitic fungus does not damage the heads or ears. To eliminate rats, use zinc phosphorus, "khe-rat" or some other poison along with destroying the rat nests. To control harmful insects and diseases effectively and inexpensively, the cadres or vegetation protection organizations in the localities must provide guidance. This is because the various harmful insects and diseases appear at different times, the various insecticides are used in different ways and the specific control methods differ.

Second, regarding the fifth-month and spring rice in the northern provinces, the weather is gradually becoming warmer, and harmful insects and diseases appear based on the growth of the rice. Highly effective control measures must be implemented now in order to reduce sources of insects and diseases at the end of the season. Control measures must continue to be implemented in the later stages in order to ensure that the rice heads. If all the tasks are done well, harmful insects and diseases will not affect yields. Specifically, the following measures must be used in order to prevent insects and diseases from damaging the fifth-month and spring rice:

The rice stem borers now in the old rice stalks, with an average density of 30 insects per square meter, are beginning to emerge from the cocoon. Thus, around the middle of March, the butterflies will lay eggs and the larvae will damage the rice plants (when the rice is tillering). The second time will occur around the middle to the end of May and damage the rice heads during heading. Thus, besides plowing under the tenth-month rice stalks in order to kill the insects still in the stalks, if butterflies are seen in March when doing the weeding, nets should be used to catch them. Also, the rice plants and leaves on which eggs have been laid must be removed.

Although rice blast is not as serious as compared with the same time last year, there are still scattered cases of this disease. In March and April when the weather is gloomy and drizzly and the humidity is high, this disease can do serious damage to the rice grown in the provinces in former Zone 4 and in the intensively cultivated areas in the Red River Delta. If the weather is like this, when the rice heads, the disease will damage the rice heads and ears, and many of the grains will be hollow. Thus, when the rice begins to tiller, if the weather turns cool and drizzly, the fields planted in highly disease-prone varieties such as CR 203, NN8, IR 1561-1-2, glutinous rice and Indian "dau" must be inspected immediately. If the disease is found, the water level must be maintained, and the application of fertilizer, particularly nitrate fertilizer, must be stopped. The plants must immediately be sprayed with kivazin or hinosan in order to prevent the disease from spreading. In May, if the weather is the same as in March and April, continue the spraying before and after the rice heads in order to prevent damage to the heads.

There is a rather large number of rice leaf beetles among the fifth-month and spring seedlings. The seedlings are being transplanted and so the beetles are appearing in the rice fields. This insect lays its eggs on the early rice. Around March, the larvae hatch and begin devouring the rice leaves. The beetles will continue to grow in the following months unless good prevention and control measures are taken. Controlling rice leaf beetles is rather simple. If beetles are seen on the rice leaves, use nets to catch the insects and then kill them. In places where nets can't be used, spray insecticides. All insecticides are effective if used properly.

Rice leaf roller butterflies lay eggs on the early spring rice. At the beginning of March, the second infestation of butterflies from the early spring rice will damage the main spring rice crop. At the beginning of April, the third infestation will appear. If there is a serious infestation, the larvae can destroy the leaves and affect yields. In particular, they can damage the boots. Thus, if butterflies appear, particularly for the third time, use nets to catch them or spray insecticide to kill the insects just after they hatch and before they have a chance to infest the rice leaves.

Brown planthoppers usually appear in March or April. If the weather is warm and rainy with intermittent sunshine, the planthoppers will grow in the fields transplanted in varieties such as NN8, NN75-10 and glutinous rice. The fields must be inspected carefully. If planthoppers are found, use mipcin bassa immediately in order to prevent the planthoppers from spreading. In wet fields, using oil to kill the planthoppers is very effective, and many places have experience in doing this.

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